

1-9 (canceled)

10. (New) A process for operating a water-bearing appliance with an optical sensor system for monitoring the treatment fluid in the appliance, said treatment fluid parameter values having known proper operation parameter values, comprising:

operating the water-bearing appliance in a program sequence with the water-bearing appliance alternately idle and in motion during said program sequence;

measuring the parameter values of said treatment fluid in said appliance during said program sequence; and

comparing said measured program sequence treatment fluid parameter values with the known proper operation treatment fluid parameter values to monitor said treatment fluid for abnormal deviations from said known proper operation treatment fluid parameter values.

11. (New) The process according to claim 10, including measuring and recording the chronological sequence of successively measured parameter values of said treatment fluid and comparing said measured sequence of parameter values to a chronological sequence of parameter values typical of a proper operation.

12. (New) The process according to claim 10, including calculating a differential value from at least a first measured parameter value during an idle phase with at least a second measured parameter value during a motion phase of said program sequence and comparing said differential value of said parameter values to a differential value of parameter values typical of a proper operation to monitor

deviations from said differential value of parameter values typical of a proper operation.

13. (New) The process according to claim 12, including said differential value of parameter values typical of a proper operation is a predetermined reference value.

14. (New) The process according to claim 11, including at least one of generating a warning signal or discontinuing said program sequence when said chronological sequence of measured parameter values of said treatment fluid deviates from said chronological sequence of parameter values typical of a proper operation.

15. (New) The process according to claim 12, including at least one of generating a warning signal or discontinuing said program sequence when said differential value of measured parameter values of said treatment fluid deviates from said differential value of parameter values typical of a proper operation.

16. (New) The process according to claim 12, including measuring said treatment fluid to obtain several values and calculating an average value from said several measured values in each of said program idle and in motion phases and forming said differential value of parameter values typical of a proper operation from said average values.

17. (New) The process according to claim 11, including measuring said treatment fluid to obtain several values in each of said program idle and in motion phases and forming

said chronological sequence of parameter values typical of a proper operation for both phases therefrom.

18. (New) The process according to claim 10, including said domestic appliance is a washing machine.

19. (New) The process according to claim 10, including said domestic appliance is a dishwashing machine.

20. (New) A water-bearing appliance with an optical sensor system for monitoring the treatment fluid in the appliance, said treatment fluid parameter values having known proper operation parameter values, comprising:

the water-bearing appliance operated in a program sequence with the water-bearing appliance alternately idle and in motion during said program sequence;

the optical sensor system measures the parameter values of said treatment fluid in said appliance during said program sequence; and

the optical sensor system compares said measured program sequence treatment fluid parameter values with the known proper operation treatment fluid parameter values to monitor said treatment fluid for abnormal deviations from said known proper operation treatment fluid parameter values.

21. (New) The appliance according to claim 20, including said optical sensor system measures and records the chronological sequence of successively measured parameter values of said treatment fluid and compares said measured sequence of parameter values to a chronological sequence of parameter values typical of a proper operation.

22. (New) The appliance according to claim 20, including said optical sensor system calculates a differential value from at least a first measured parameter value during an idle phase with at least a second measured parameter value during a motion phase of said program sequence and compares said differential value of said parameter values to a differential value of parameter values typical of a proper operation to monitor deviations from said differential value of parameter values typical of a proper operation.

23. (New) The appliance according to claim 22, including said differential value of parameter values typical of a proper operation is a predetermined reference value.

24. (New) The appliance according to claim 21, including said optical sensor system generates at least one of a warning signal or discontinues said program sequence when said chronological sequence of measured parameter values of said treatment fluid deviates from said chronological sequence of parameter values typical of a proper operation.

25. (New) The household appliance according to claim 22, including said optical sensor system generates at least one of a warning signal or discontinues said program sequence when said differential value of measured parameter values of said treatment fluid deviates from said differential value of parameter values typical of a proper operation.

26. (New) The household appliance according to claim 22, including said optical sensor system measures said treatment fluid to obtain several values and calculates an

average value from said several measured values in each of said program idle and in motion phases and forms said differential value of parameter values typical of a proper operation from said average values.

27. (New) The household appliance according to claim 21, including said optical sensor system measures said treatment fluid to obtain several values in each of said program idle and in motion phases and forms said chronological sequence of parameter values typical of a proper operation for both phases therefrom.

28. (New) The household appliance according to claim 20, including said optical sensor system is a component of a washing machine.

29. (New) The household appliance according to claim 22, including said optical sensor system is a component of a dishwashing machine.